

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A method ~~for making an actuator/coil assembly for a data storage device~~, comprising the steps of:

overmolding a coil to an actuator, ~~wherein said overmolding step comprises attaching to~~

attach said coil to said actuator via an intervening overmold material; and

disposing an adhesive in at least one adhesive receptacle defined in the overmold material

so that the adhesive contactingly engages the coil and the actuator, wherein said

disposing step is executed after said overmolding step.

2. (Original) A method, as claimed in Claim 1, wherein:

said overmolding step comprises forming a first overmolded part that is attached to each
of said actuator and said coil by said overmolding step.

3. (Currently amended) A method, as claimed in Claim 2, wherein:

said overmolding step further comprises forming a bobbin from an additional amount of

the overmold material that is attached to said coil by said overmolding step,

wherein said coil is disposed about at least part of said bobbin.

4. (Original) A method, as claimed in Claim 1, wherein:

said overmolding step comprises forming a first overmolded part and providing a first stiffness for an interconnection of said first overmolded part to at least one of said actuator and said coil, and wherein said disposing step comprises providing a second stiffness for said interconnection, wherein said second stiffness is greater than said first stiffness.

5. (Original) A method, as claimed in Claim 1, wherein:

said overmolding step comprises disposing said coil and said actuator in a mold, wherein said method further comprises the step of removing said actuator from said mold after said overmolding step and thereby with said coil being attached to said actuator, and wherein said disposing step is executed after said removing step.

6. (Original) A method, as claimed in Claim 5, wherein:

said disposing step is executed without any fixtures to retain said coil in a predetermined position relative to said actuator.

7. (Original) A method, as claimed in Claim 1, wherein:

said overmolding step comprises forming a first overmolded part and forming a first adhesive receptacle in said first overmolded part, wherein said disposing step is executed within said first adhesive receptacle.

8. (Original) A method, as claimed in Claim 7, wherein:

said first overmolded part structurally joins said actuator with said coil.

9. (Original) A method, as claimed in Claim 8, wherein:

said forming a first adhesive receptacle step comprises disposing said first adhesive receptacle on a perimeter of said first overmolded part.

Claims 10-12 (Cancelled).

13. (Original) A method, as claimed in Claim 7, wherein:

said coil comprises a coil opening, wherein said first overmolded part is disposed within said coil opening and is attached to said coil.

14. (Original) A method, as claimed in Claim 13, wherein:

said adhesive within said first adhesive receptacle attaches to both said first overmolded part and said coil.

15. (Original) A method, as claimed in Claim 1, wherein:

said overmolding step comprises forming a first overmolded part, forming at least one said adhesive receptacle in said first overmolded part, forming a second overmolded part, and forming at least one said adhesive receptacle in said second overmolded part, wherein said first overmolded part is disposed between and is attached to each of said actuator and said coil by said overmolding step, wherein

said coil is disposed about at least part of said second overmolded part and is attached to said second overmolded part by said overmolding step, wherein said adhesive in at least one said adhesive receptacle is attached to at least said actuator and said first overmolded part, wherein said adhesive in at least one said adhesive receptacle is attached to at least said first overmolded part and said coil, and wherein said adhesive in at least one said adhesive receptacle is attached to both said coil and said second overmolded part.

16. (Original) A method, as claimed in Claim 1, further comprising the step of:
wicking said adhesive into a space after said disposing step.

17. (Original) A method for making an actuator/coil assembly for a data storage device, comprising the steps of:
disposing a coil and an actuator in a mold;
executing a first molding step comprising molding a first molded part that structurally joins said coil to said actuator, wherein said first molding step is executed within said mold;
executing a second molding step comprising molding a bobbin that structurally joins said coil to said bobbin, wherein coil is disposed about at least part of said bobbin, and wherein said second molding step is also executed within said mold;
forming at least one adhesive receptacle in at least one of said first molded part and said bobbin during at least one of said first and second molding steps;

removing said actuator, said first molded part, said coil, and said bobbin from said mold
as a single unit after completion of said first and second molding steps; and
disposing an adhesive in said at least one adhesive receptacle after said removing step.

18. (Original) A method, as claimed in Claim 17, wherein:
said first and second molding steps are executed simultaneously.

19. (Original) A method, as claimed in Claim 17, wherein:
said first and second molding steps each comprise overmolding.

20. (Original) A method, as claimed in Claim 17, wherein:
said disposing step comprises increasing a stiffness of at least one of first and second
interconnections, wherein said first interconnection is between said actuator and
said coil, and wherein said second interconnection is between said coil and said
bobbin.

21. (Original) A method, as claimed in Claim 17, wherein:
said disposing step is executed without any fixtures to retain said coil in a predetermined
position relative to said actuator.

22. (Original) A method, as claimed in Claim 17, wherein:

said forming at least one adhesive receptacle step comprises a first adhesive receptacle that intersects with a joint defined in part by one of first molded part and said bobbin.

23. (Original) A method, as claimed in Claim 22, wherein:

said first adhesive receptacle intersects with a joint between said first molded part and said actuator.

24. (Original) A method, as claimed in Claim 22, wherein:

said first adhesive receptacle intersects with a joint between said first molded part and said coil.

25. (Original) A method, as claimed in Claim 22, wherein:

said first adhesive receptacle intersects with a joint between said first molded part and said actuator, as well as with a joint between said first molded part and said coil.

26. (Original) A method, as claimed in Claim 22, wherein:

said first adhesive receptacle intersects with a joint between said bobbin and said coil.

27. (Original) A method, as claimed in Claim 17, wherein:

said forming at least one adhesive receptacle step comprises forming a plurality of said adhesive receptacles, wherein said adhesive in at least one said adhesive

receptacle is attached to at least said actuator and said first overmolded part, wherein said adhesive in at least one said adhesive receptacle is attached to at least said first overmolded part and said coil, and wherein said adhesive in at least one said adhesive receptacle is attached to both said coil and said bobbin.

28. (Original) A method, as claimed in Claim 17, wherein:

said forming at least one adhesive receptacle step comprises a first adhesive receptacle that intersects with a first joint between said actuator and said first molded part, as well as with a second joint between said first molded part and said coil, and wherein said forming at least one adhesive receptacle step further comprises forming a second adhesive receptacle that intersects with a second joint between said bobbin and said coil.

29. (Currently amended) A method ~~for making an actuator/coil assembly for a data storage device~~, comprising the steps of:

employing ~~a first bonding~~ an initial overmolding operation to attach a coil to an actuator via an overmolding material while forming an adhesive receptacle in said material; and

subsequently filling the adhesive receptacle with an adhesive to further ~~employing a second bonding operation to~~ attach said coil to said actuator, wherein the adhesive contactingly engages the coil and the actuator. ~~said second bonding operation is executed after a completion of said first bonding operation.~~

30. (Currently amended) A method, as claimed in Claim 29, wherein:

the employing said first bonding operation step comprises providing a first stiffness for an interconnection of said actuator to said coil, and wherein the subsequently filling step ~~said second bonding operation~~ step comprises providing a second stiffness for said interconnection of said actuator to said coil, wherein said second stiffness is greater than said first stiffness.

31. (Currently amended) A method, as claimed in Claim 29, wherein:

the subsequently filling step comprises flowing the adhesive into a notch in the actuator which communicates with the adhesive receptacle.

~~said first bonding operation comprises an overmolding operation, and wherein said second bonding operation comprises disposing an adhesive in at least one joint resulting from said overmolding operation.~~

32. (Currently amended) A method, as claimed in Claim 31, wherein:

said overmolding operation comprises forming a first overmolded part that is attached to each of said actuator and said coil.

33. (Currently amended) A method, as claimed in Claim 31, wherein:

said overmolding operation comprises forming ~~at least one~~ the adhesive receptacle in said first overmolded part, ~~wherein said disposing step is executed within said at least one adhesive receptacle.~~

34. (Currently amended) A method, as claimed in Claim 33, wherein:

the employing step comprises forming a plurality of discrete adhesive receptacles in the overmold material, and wherein the subsequently filling step comprises filling each of the plurality of discrete adhesive receptacles with a separate volume of adhesive that respectively contactingly engages the coil and the actuator and does not contactingly engage any other said separate volume of adhesive.

~~said at least one adhesive receptacle intersects with a joint between said first overmolded part and said actuator.~~

35. (Currently amended) A method, as claimed in Claim 33, wherein:

the employing step further comprises employing the initial overmolding operation to additionally form a coil bobbin within and directly attached to an interior circumferential extent of the coil from an additional volume of said overmolding material, said overmolded coil bobbin comprising a second adhesive receptacle; and

the subsequently filling step further comprises filling the second adhesive receptacle with an additional volume of said adhesive to further attach the coil bobbin to the coil.

~~said at least one adhesive receptacle intersects with a joint between said first overmolded part and said coil.~~

Claim 36 (Cancelled).

37. (Currently amended) A method for making a coil/bobbin assembly for a data storage device, comprising the steps of:

employing ~~a first bonding~~ an initial overmolding operation to attach a voice motor coil to a bobbin via an overmolding material while forming an adhesive receptacle in said material; and

subsequently filling the adhesive receptacle with an adhesive to further ~~employing a second bonding operation to~~ attach said bobbin to said coil, wherein the adhesive contactingly engages the coil and the bobbin. ~~said second bonding operation is executed after a completion of said first bonding operation.~~

38. (Currently amended) A method, as claimed in Claim 37, wherein:

the employing step comprises forming a plurality of discrete adhesive receptacles in the overmold material, and wherein the subsequently filling step comprises filling each of the plurality of discrete adhesive receptacles with a separate volume of adhesive that respectively contactingly engages the coil and the bobbin and does not contactingly engage any other said separate volume of adhesive.

~~said first bonding operation step comprises providing a first stiffness for an interconnection of said bobbin to said coil, and wherein said second bonding operation step comprises providing a second stiffness for said interconnection of said bobbin to said coil, wherein said second stiffness is greater than said first stiffness.~~

39. (Currently amended) A method, as claimed in Claim 37, wherein: further comprising
~~the step of:~~

the employing step further comprises employing the initial overmolding operation to
additionally attach the coil to an actuator using an additional volume of said
overmolding material, said additional volume of said overmolding material
comprising a second adhesive receptacle; and

the subsequently filling step further comprises filling the second adhesive receptacle with
an additional volume of said adhesive to further attach the coil bobbin to the coil.

~~forming said bobbin by an overmolding operation, wherein said overmolding operation~~
~~attaches said bobbin to said coil and comprises said first bonding operation.~~

Claims 40-51 (Cancelled).